

REMARKS

Claims 1-8 and 13-20 are pending in this application. Claim 1 is an independent claim.

By this Amendment, claim 13 is added to depend from claim 1. Support for claim 13 may be found in the specification at, for example, paragraph [0078]. New claims 14-20 recite the subject matter of claims 2-8, respectively, but depend from claim 13.

No new matter is added. Reconsideration of the application is respectfully requested.

I. Claims 1-8 Define Patentable Subject Matter

The Office Action rejects claims 1-3, 6 and 8 under 35 U.S.C. §103(a) over U.S. Patent Application Publication No. 2002/0180119 to Kumazawa in view of U.S. Patent Application Publication No. 2003/0041574 to Noguchi; rejects claims 1-4 and 6-8 under 35 U.S.C. §103(a) over Kumazawa in view of Noguchi and further in view of U.S. Patent No. 5,087,278 to Suzuki; and rejects claim 5 under 35 U.S.C. §103(a) over Kumazawa in view of Noguchi and Suzuki and further in view of U.S. Patent Application Publication No. 2004/0053050 to Guerfi. These rejections are respectfully traversed.

Claim 1 recites a specific range of negative pressure (reduced pressure). The Office Action recognizes that Kumazawa does not disclose this feature, but asserts that Noguchi discloses a vacuum tug mill at paragraph [0082] that is used for mixing the clay. The Office Action recognizes that Noguchi does not disclose a specific negative pressure range, but asserts that one of ordinary skill would have optimized the negative pressure to the range recited in claim 1. The Office Action also asserts that the pressure range recited in claim 1 does not appear to achieve anything beyond expected and predictable results. These assertions are incorrect because (1) the Office Action has not established a reason for the asserted optimization, and (2) the recited pressure range yields unexpected results, as discussed separately below.

First, the recited pressure range is discovered based on the balance between having the clay sufficiently deaerated, and, at the same time, preventing microcapsule damage, as disclosed in the specification at, for example, paragraph [0068]. Noguchi does not recognize the desired balanced result between having the clay sufficiently deaerated and preventing microcapsule damage.

The particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation.

MPEP §2144.05(II) (B). The Office Action fails to establish that Noguchi recognizes the above discussed balanced result. In fact, Noguchi merely discloses the use of a tug mill.

Even if under the Office Action's assertion, the use of this tug mill is merely for gas removal. Noguchi does not disclose prevention of microcapsule damage balanced with the gas removal. Thus, Noguchi does not recognize the balanced result. Thus, the asserted optimization to reach the pressure range recited in claim 1 is not actually supported.

Even if for the purpose of discussion, the Office Action alleges optimization with regard to the pressure of the tug mill, such optimization would only lead to an optimal gas removal. Such an optimization would not lead to the recited pressure range which is based on the balance between having the clay deaerated and, at the same time, preventing microcapsule damage.

For this reason alone, the rejection of claim 1 is incorrect.

Second, the negative pressure range recited in claim 1 yields unexpected results, as discussed in the specification at table 2 and paragraph [0098]. Thus, the recited negative pressure range is a critical feature. Such "criticality" rebuts a *prima facie* case of obviousness under the MPEP §2144 III and §2144.05 III. This is a separate reason that the rejection of claim 1 is incorrect.

In view of the above, the asserted combination of Kumazawa and Noguchi would not have rendered obvious the subject matter recited in claim 1. Thus, withdrawal of the rejection of claim 1, and claims 2-8 depending therefrom, under 35 U.S.C. §103(a) is respectfully requested.

II. New Claims 13-20 Define Patentable Subject Matter

New claims 13-20 are each patentable at least in view of the patentability of claim 1, from which they depend, as well as for the additional features they recite.

For example, a feature of the present application is the reduced amount of forming agent as a result of the spherical raw materials. See the specification at, for example, paragraph [0009]. Such a reduced amount is in comparison with the disclosure of the spherical features of the raw material at paragraph [0032]-[0035]. For example, paragraph [0078] of the specification discloses that, to achieve a porosity in a controlled range of 60 to 72%, only 1-3 parts by mass of the forming agent is added in 100 parts by mass of raw material particles. This feature is recited in claim 13. The applied references do not disclose this additional feature, as recited in claim 13. For at least this additional reason, claim 13, and claims 14-20 depending therefrom, define patentable subject matter.

III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Gang Luo
Registration No. 50,559

JAO:GL/eks

Date: January 29, 2010

OLIFF & BERRIDGE, PLC
P.O. Box 320850
Alexandria, Virginia 22320-4850
Telephone: (703) 836-6400

**DEPOSIT ACCOUNT USE
AUTHORIZATION**

Please grant any extension
necessary for entry of this filing;
Charge any fee due to our
Deposit Account No. 15-0461